



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,241	01/21/2004	Kia Silverbrook	WAL20US	2181
24011 7590 10/28/2009 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA				
EXAMINER				
NGUYEN, LAM S				
ART UNIT		PAPER NUMBER		
2853				
NOTIFICATION DATE		DELIVERY MODE		
10/28/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pair@silverbrookresearch.com
patentdept@silverbrookresearch.com
uscorro@silverbrookresearch.com

Office Action Summary

Application No.

10/760,241

Applicant(s)

SILVERBROOK ET AL.

Examiner

LAM S. NGUYEN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-10, 16, 18, 19, 30, 36-41 and 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-10, 16, 18, 19, 30, 36-41 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 45-46 of U.S. Patent No. 6944970 in view of Rhoads et al. (US 5414453).

Claims 45-46 of U.S. Patent No. 6944970 discloses the claimed invention except adjusting a distance between the printhead and the web of blank media by adjusting adjusters on a rail removably supporting the printhead in the printer.

Rhoads et al. discloses a printing apparatus comprising a printhead (*FIG. 7, element 22*) for forming images on a blank printing medium (*FIG. 7, element 90*), wherein the distance between the printhead and the blank media is adjusted by adjusting adjusters (*FIGs. 7-9, element 119*) on a rail (*FIGs. 7-9, element 6*) removably supporting the printhead.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the printing apparatus disclosed by claims 45-46 of U.S. Patent No. 6944970 to include adjusters for adjusting the distance between the printhead and the blank media in order to optimize print quality as taught by Rhoads et al. (*Abstract*).

2. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 45-46 of U.S. Patent No. 6920704 in view of Rhoads et al. (US 5414453).

Claims 45-46 of U.S. Patent No. 6920704 discloses the claimed invention except adjusting a distance between the printhead and the web of blank media by adjusting adjusters on a rail removably supporting the printhead in the printer.

Rhoads et al. discloses a printing apparatus comprising a printhead (*FIG. 7, element 22*) for forming images on a blank printing medium (*FIG. 7, element 90*), wherein the distance between the printhead and the blank media is adjusted by adjusting adjusters (*FIGs. 7-9, element 119*) on a rail (*FIGs. 7-9, element 6*) removably supporting the printhead.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the printing apparatus disclosed by claims 45-46 of U.S. Patent No. 6920704 to include adjusters for adjusting the distance between the printhead and the blank media in order to optimize print quality as taught by Rhoads et al. (*Abstract*).

3. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 10 of U.S. Patent No. 7108434 in view of Rhoads et al. (US 5414453).

Claims 1 and 10 of U.S. Patent No. 7108434 discloses the claimed invention except adjusting a distance between the printhead and the web of blank media by adjusting adjusters on a rail removably supporting the printhead in the printer.

Rhoads et al. discloses a printing apparatus comprising a printhead (*FIG. 7, element 22*) for forming images on a blank printing medium (*FIG. 7, element 90*), wherein the distance between the printhead and the blank media is adjusted by

adjusting adjusters (*FIGs. 7-9, element 119*) on a rail (*FIGs. 7-9, element 6*)
removably supporting the printhead.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the printing apparatus disclosed by claims 1 and 10 of U.S. Patent No. 7108434 to include adjusters for adjusting the distance between the printhead and the blank media in order to optimize print quality as taught by Rhoads et al. (*Abstract*).

4. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over each of claims 16-17 and 49 of copending Application No. 10/760251; claims 16, 34 and 49 of copending Application No. 10/760199; or claims 16, 30 and 49 of copending Application No. 10/760230.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 48 of copending Application No. 10/760240 in view of Rhoads et al. (US 5414453).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 48 of copending Application No. 10/760240 discloses the claimed invention except adjusting a distance between the printhead and the web of blank media by adjusting adjusters on a rail removably supporting the printhead in the printer.

Rhoads et al. discloses a printing apparatus comprising a printhead (*FIG. 7, element 22*) for forming images on a blank printing medium (*FIG. 7, element 90*), wherein the distance between the printhead and the blank media is adjusted by adjusting adjusters (*FIGs. 7-9, element 119*) on a rail (*FIGs. 7-9, element 6*) removably supporting the printhead.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the printing apparatus disclosed by claim 48 of copending Application No. 10/760240 to include adjusters for adjusting the distance between the printhead and the blank media in order to optimize print quality as taught by Rhoads et al. (*Abstract*).

6. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12 and 49 of copending Application No. 10/760214 in view of Rhoads et al. (US 5414453).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 12 and 49 of copending Application No. 10/760214 disclose the claimed invention except adjusting a distance between the printhead and the web of blank media by adjusting adjusters on a rail removably supporting the printhead in the printer.

Rhoads et al. discloses a printing apparatus comprising a printhead (*FIG. 7, element 22*) for forming images on a blank printing medium (*FIG. 7, element 90*), wherein the distance between the printhead and the blank media is adjusted by adjusting adjusters (*FIGs. 7-9, element 119*) on a rail (*FIGs. 7-9, element 6*) removably supporting the printhead.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the printing apparatus disclosed by claims 12 and 49 of copending Application No. 10/760214 to include adjusters for adjusting the distance between the printhead and the blank media in order to optimize print quality as taught by Rhoads et al. (*Abstract*).

7. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 49/1 of copending Application No. 10/760266 (Amendment dated 03/05/2009) in view of Edrinn (US 3779473).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 49/1 of copending Application No. 10/760266 discloses the claimed invention except wherein the blank web is automatically threaded past along the media path.

Edrinn discloses an automatic paper loading in a printing apparatus, in which a roll of paper (*FIG. 1, element 12*) is automatically threaded past a printhead along a desired media path (*column 1, lines 40-45*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the claimed printing apparatus disclosed in the copending applications to include means for automatically threading the blank web as disclosed by Edrinn. The motivation for doing so would have been to be able to improve mechanism for automatically loading and guiding rolled paper as taught by Edrinn (*column 1, lines 14-17*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the

time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 6-10, 18-19, 36-37, 40, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Edrinn (US 3779473) and Rhoads et al. (US 5414453).

Regarding to claims 1, 37, 40:

Martin discloses a method/apparatus for producing wallpaper on-demand, comprising the steps of:

utilizing an on-demand printer comprising a cabinet/frame (*FIG. 2, element 18*) in which is located a media path extending from a media loading area (*FIG. 2, element 24*) to a winding area/dispersing slot adapted to removably retain a core and wind onto it (*FIG. 2, element 26*) and passing a printhead (*FIG. 2, element 20*) located across the media path and on the way to a dispersing slot (*FIG. 2*), a web of blank media being fed past the printhead along the media path (*FIG. 2, element 24*), there being a processor (*FIG. 2, element 38*) which accepts operator inputs from one or more input devices (*FIG. 2, element 32*) and which controls the printer;

using one or more input devices which communicate with the processor to capture/input/provide data from an operator regarding a selection of a

specification, a pattern, and a configuration; running the printer according to the data; printing a single roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern and configuration (*paragraphs [0009]-[0010]*).

- Martin however is silent wherein the blank web is automatically threaded past along the media path.

Edrinn discloses an automatic paper loading in a printing apparatus, in which a roll of paper (*FIG. 1, element 12*) is automatically threaded past a printhead along a desired media path (*column 1, lines 40-45*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Martin's printing apparatus to include means for automatically threading the blank web as disclosed by Edrinn. The motivation for doing so would have been to be able to improve mechanism for automatically loading and guiding rolled paper as taught by Edrinn (*column 1, lines 14-17*).

- Martin also does not teach adjusting a distance between the printhead and the web of blank media by adjusting adjusters on a rail removably supporting the printhead in the printer.

Rhoads et al. discloses a printing apparatus comprising a printhead (*FIG. 7, element 22*) for forming images on a blank printing medium (*FIG. 7, element 90*),

wherein the distance between the printhead and the blank media is adjusted by adjusting adjusters (*FIGs. 7-9, element 119*) on a rail (*FIGs. 7-9, element 6*) removably supporting the printhead.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Martin's printing apparatus to include adjusters for adjusting the distance between the printhead and the blank media in order to optimize print quality as taught by Rhoads et al. (*Abstract*).

- **Martin also teaches the following claimed invention:**

Regarding to claim 6: providing the printer with scanner on a tether for capturing data that specifies a selected pattern or other data (*claims 10-11: Since the printer is a xerographic, the printer comprises a scanner*).

Regarding to claims 8-9: wherein the pattern is selected from printed swatches which correspond to patterns that the printer is able to print on demand, and further comprising the step of: providing a plurality of swatches; assigning a symbol to each swatch; using the symbol as an input to a printer input device (*FIG. 1*).

Regarding to claims 7, 10, 18: the configuration being one or more parameters that customers are allowed to select are selected from the group

comprising: roll length, a roll slitting arrangement, one or more modifications to the pattern, or a selection of media to be printed on (*paragraph [0010]*).

Regarding to claim 19: selling printed rolls as they are produced to eliminate printed wallpaper inventory (*FIG. 3*).

Regarding to claim 36: wherein the length and design of the roll are determined by the operator inputs (*paragraph 0010*).

Regarding to claim 48: a motor within the cabinet for advancing the media web out of the media cartridge and one or more motors adapted to urge the media along the path and out of the slot (*FIG. 2: The corresponding motor or motors drive(s) the supply roll, the take-up roll, or the drive roller*).

9. Claims 30 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Edrinn (US 3779473) and Rhoads et al. (US 5414453), and further in view of Nozawa (US 5701147).

Martin, as modified, discloses the claimed invention as discussed above and also teaches changing the pattern according to a new datum from an operator and then printing a new roll onto the same web (*paragraph [0010]: A user loads a blank roll of wallpaper in the printer and inputs one or more personal images that is/are printed on the blank roll. It means that for each customer or order a blank*

roll is loaded and printed with a new pattern (design/image). In addition, at certain point of time, when the length of the current roll is not enough for a new order, then a new roll is loaded to the same web for printing images with the new order). Martin however does not teach wherein the printhead is full width.

Nozawa discloses a printing apparatus comprising full width printheads (*FIG. 9, element 204*) for forming images across a moving printing medium (*FIG. 9, element 203*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Martin's printhead, as modified, to be full width printhead as disclosed by Nozawa. The motivation for doing so would have been to be able to print the entire width of the printing medium without scanning the printhead to gain printing speed as taught by Nozawa (*column 1, lines 30-39; column 3, lines 57-62*).

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Edrinn (US 3779473) and Rhoads et al. (US 5414453), and further in view of Stoffel et al. (US 6412990).

Martin, as modified, discloses the claimed invention as discussed above except using the video display as a touchscreen input device to capture operator preferences or acquiring data about pattern or configuration.

Stoffel et al. discloses an printing apparatus having a video display as a touchscreen (*FIG. 15, element 42*) input device to capture/acquire operator/customer preferences to allow the operator/customer to custom printing images by simply touching the viewing screen (*column 8, lines 55-60*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Marin's video display (as modified) as a touchscreen as disclosed by Stoffel et al. The motivation for doing so would have been to allow an operator/customer to custom printing images by simply touching the viewing screen as taught by Stoffel et al. (*column 8, lines 55-60*).

11. Claims 4, 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Edrinn (US 3779473) and Rhoads et al. (US 5414453), and further in view of Goldstein (US 2002/0069078 A1).

Martin, as modified, discloses the claimed invention as discussed above but is silent about charging a customer for the roll or obtaining/attempting to obtain a fee from a franchisee.

Goldstein discloses a system for creating custom wallpaper including a program to charge and obtain fee from customers ordered printed wallpaper rolls (*FIG. 2, steps 208, 210, 212, 214*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Martin's apparatus to include means for charging and obtaining fee from a customer as disclosed by Goldstein et al. The motivation for doing so would have been to allow an operator/customer to purchase created custom wallpaper as taught by Goldstein (*paragraphs [0043]-[0046]*).

12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Edrinn (US 3779473) and Rhoads et al. (US 5414453), and further in view of Rottman (US 5526028).

Martin, as modified, discloses the claimed invention as discussed above except drying the web after it is printed on but before it is dispensed by the printer.

Rottman discloses a printing apparatus including a printhead assembly (*FIG. 1, element 16*) for forming images on a printing medium (*FIG. 1, element 17*) and a dryer (*FIG. 1, element 26*) for drying the printed images on the printing medium before the printed medium is dispensed.

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Martin's printing apparatus, as modified, to include a dryer for drying printed images before the printed medium is dispensed as disclosed by Rottman. The motivation for doing so would have been

to ensure ink deposited on the printing medium to form images is dried and fixed on the printing medium as taught by Rottman (*FIG. 1*).

Response to Arguments

Applicant's arguments filed 07/29/2009 have been fully considered but they are not persuasive.

In response to the Applicant's argument that Rhoads' rod cannot be a rail because the rod is cylindrical, the Examiner disagrees with such assertion because the claimed rail is broadly interpreted based on its function rather its shape. Since Rhoads' rod is removably supporting the printhead, Rhoads' rod reads on the rail as claimed. In addition, because Rhoads's adjuster is adjusted to increase or decrease the printhead-to-media spacing (Abstract), the distance between the printhead and the web media is adjusted, in other words.

Moreover, in the terminal disclaimer filed on 7/29/2009, the Applicant wrongly identified the copending application, which should be 10/760266 rather than 10/760260. As a result, the corresponding non-statutory double patenting rejection is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM S. NGUYEN whose telephone number is (571)272-2151. The examiner can normally be reached on 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571)272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LAM S NGUYEN/
Primary Examiner, Art Unit 2853